

PUBLIC NOTICE

**Federal Aid Project MO F-54-D-20
May 1, 2016 – December 31, 2019**

Project Description

Project Name: Hunnewell Fish Hatchery Production Pond Renovation (Phases 2 and 3)

Location: Hunnewell Fish Hatchery in Shelby County, Missouri (see attached vicinity map)

Purpose:

The purpose of this project is to renovate 16 fish production ponds (ponds 1, 2 and 11-24; 0.37 - 0.60 acres) by replacing the concrete harvesting kettles and shallow end water supply valves, replacing the water supply line, and replacing the sewer line with the addition of manholes.

Hunnewell Fish Hatchery has 24 fish production ponds -- eight large ponds (ponds 3-10; 0.95 - 1.21 acres) and 16 small ponds (ponds 1, 2 and 11-24; 0.37 - 0.60 acres). These ponds were constructed in the late 1950s, and many of the water supply, water drainage and fish harvesting structures and fixtures are deteriorating or in need of improvement. Construction on Phase 1 of the project was completed in 2015 under Federal Aid Project MO F-54-D-16, and the final report is being compiled.

Each pond is equipped with a reinforced concrete water control structure (known as a stack) and a connecting harvest kettle. The stacks, which contain screens for both inflow and out-flow as well as valves used for controlling water flow and level, pose a safety hazard. There are no safety rails to prevent staff from falling off the structures on ponds 1, 2 and 11-24. Concrete has deteriorated on these small ponds, and the stairs leading into the ponds are cracking and shifting. The structures, in their current condition, do not have the ability to mechanically maintain a constant water level within the harvest kettle as the fish are held and harvested. Because of this, one staff member is always dedicated to operating the water control valves during a harvest.

The water supply line to the ponds is deteriorated and needs to be replaced. The valves for the water supply line at the shallow ends of the fish production ponds that control segments of the hatchery's water supply system are also deteriorating and leaking. The existing sewer line that services the northeastern ponds (ponds 11, 13, 15, 17, 19 and 21) is deteriorated and difficult to maintain.

Phase 1 of our effort to renovate all 24 fish production ponds was completed in 2015 and focused on renovation of the eight largest ponds (ponds 3-10). Phases 2 and 3 of the project will focus on the renovation of the 16 smaller ponds (ponds 1, 2 and 11-24) where 8-12" channel catfish are commonly reared. The project will replace the concrete harvesting kettles and shallow end water supply valves of the ponds. The kettles will be reoriented on the northeastern ponds to allow for more efficient harvesting and maintenance. The new kettles will make fish harvest and maintenance more efficient, and improve the condition and survival of harvested fish. The kettles will have wider and deeper steps on both sides of the structures, making harvest operations safer and more efficient. The new design also eliminates the need for suspended walkways and includes safety railings around the tops of the structures, making work safer for employees.

Associated with the kettle replacement, replacement of the water supply line and valves will give us the ability to maintain a constant water level within the kettles during fish harvest. The sewer line that services the northeastern ponds will also be replaced to allow for reorientation of the kettles in these

ponds, such that a future addition of aerators would have little impact to the facility if desired. Three new manholes will be installed in the sewer line to allow easier access for maintenance.

Description of Work:

Construction plans and specifications for both Phases 2 and 3 were developed by a Department engineer (see attached construction plans). A full set of bid specifications is available upon request. The work will be performed by a single prime contractor under the supervision of the Department.

The following work will be performed under Phases 2 and 3 --

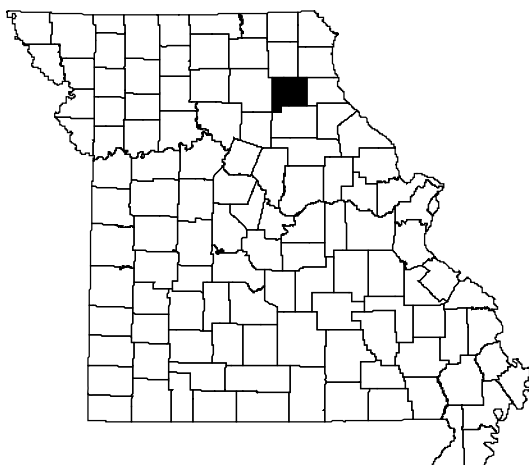
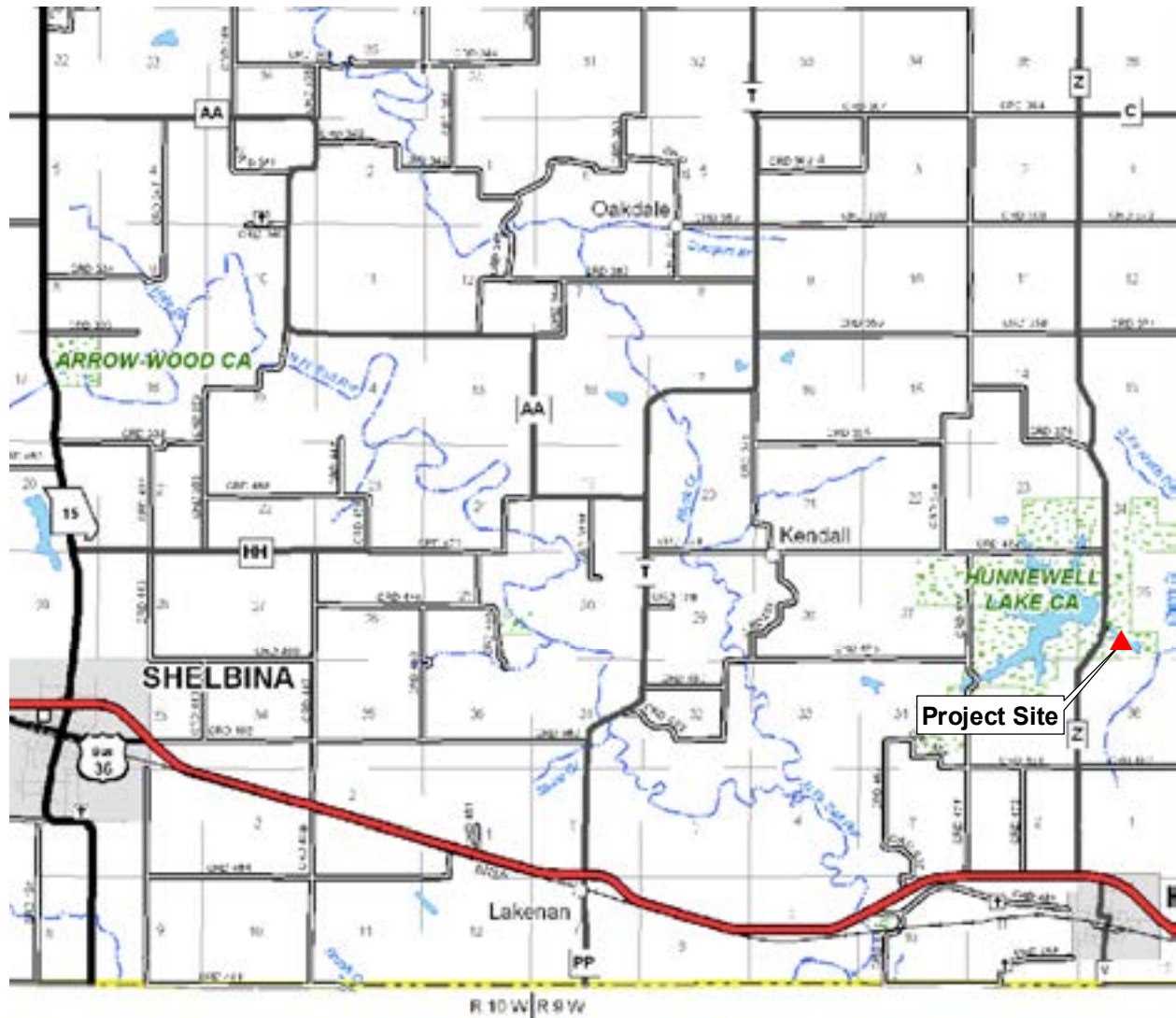
- Construction survey and staking will be performed.
- Existing concrete kettles and shallow end valves and aprons in pools 1, 2 and 11-24 will be demolished and removed.
- New concrete kettles will be installed in pools 1, 2 and 11-24. This will include: connecting the kettles to the new water supply lines, existing drain pipes, new drain pipes, furnishing and installing clean rock under stairs and sidewalks to act as a flow path to drains in kettle walls, dewatering the construction footprint, furnishing and placing riprap at specified locations, furnishing and placing mud slab for the kettle footings/footprint, furnishing and installing canal gate, furnishing and installing screens, furnishing and installing grates and handrails, and placing concrete sidewalks and stairs.
- Existing shallow end fill valves will be replaced, including valve covers, valve boxes, erosion protection pads and any associated miscellaneous items as indicated on the construction plans.
- The existing 12" water supply line will be replaced. Portions of the existing water supply line will be left in place and grouted, while other portions will be removed.
- The existing sewer line that services ponds 11, 13, 15, 17, 19 and 21 will be replaced. Portions of the existing sewer line will be left in place and grouted, while other portions will be removed. Three manholes will be installed in the new sewer line.
- The bottoms of the production ponds will be graded as needed to ensure that the ponds drain completely into the newly constructed kettles.
- Service roads affected by construction activities will be repaired (as needed), and any disturbed grass areas will be seeded and mulched.

For additional information or to provide comments, please contact:

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Jefferson City, MO 65102*

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573-522-4115, #3164

Hunnewell Fish Hatchery Vicinity Map

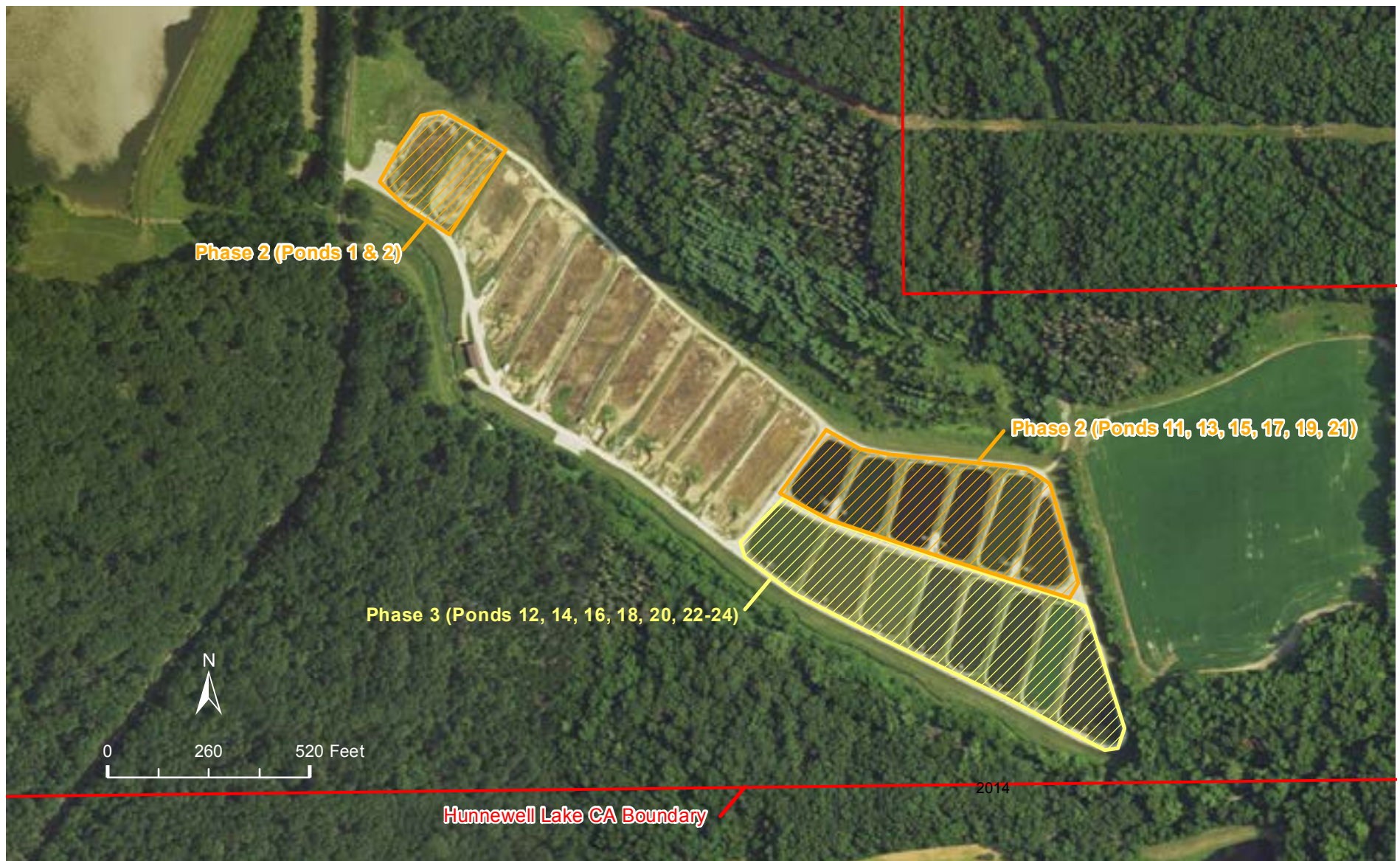


Shelby County

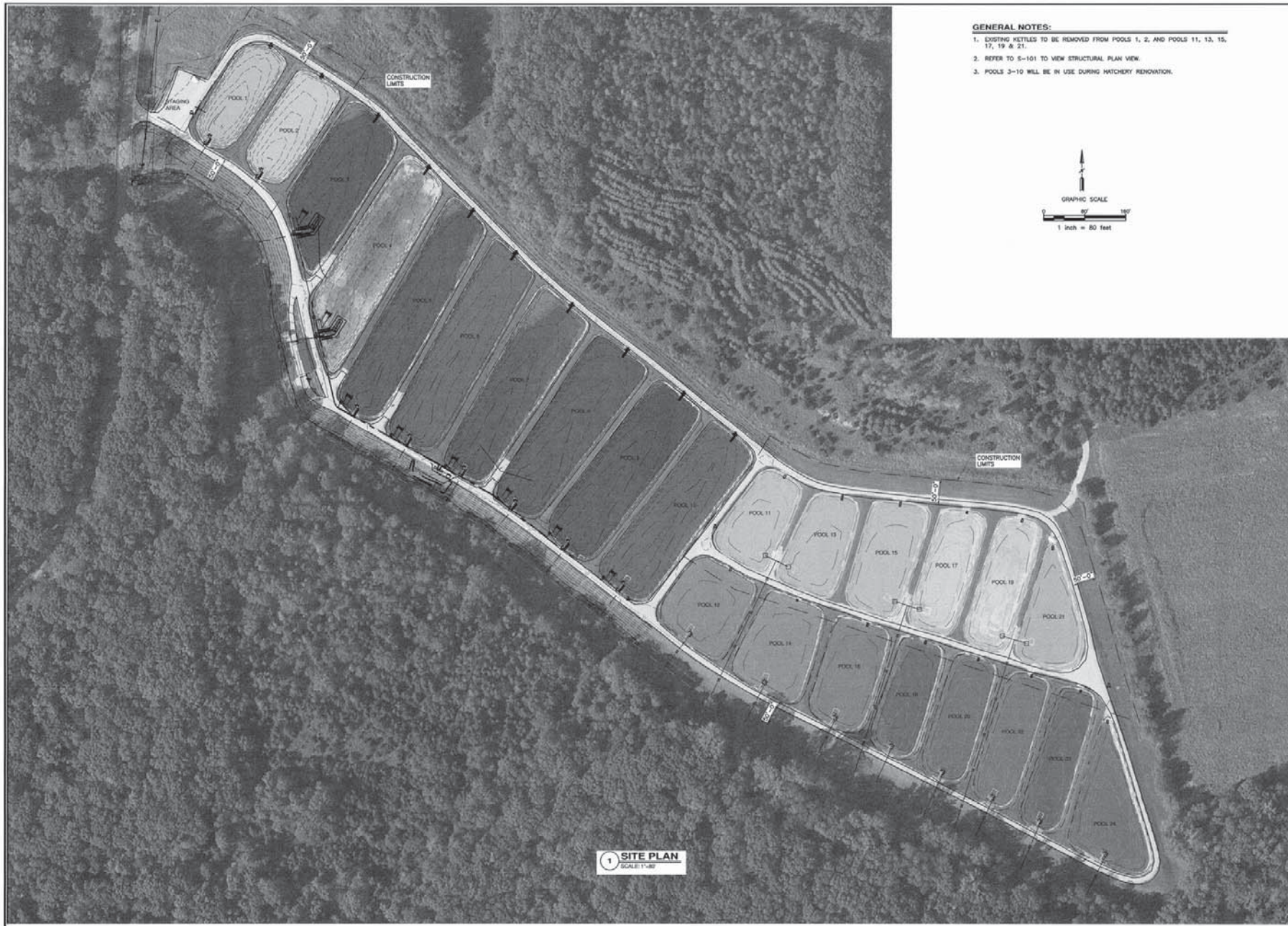


0 1 2 Miles

Federal Aid Project MO F-54-D-20
Hunnewell Fish Hatchery Production Pond Renovation (Phases 2 & 3)
Aerial View of the Project Site

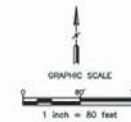


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GENERAL NOTES:

1. EXISTING KETTLES TO BE REMOVED FROM POOLS 1, 2, AND POOLS 11, 13, 15, 17, 19 & 21.
2. REFER TO S-101 TO VIEW STRUCTURAL PLAN VIEW.
3. POOLS 3-10 WILL BE IN USE DURING HATCHERY RENOVATION.



**HUNNEWELL LAKE
CONSERVATION
AREA**

**KETTLE REPLACEMENT -
PHASE II**

6503 HWY Z, HUNNEWELL,
MO 63443

MARK	DATE	DESCRIPTION	ISSUE
1	02/07/18	ISSUED	

PROJECT NO: **53-02-32**
CAD DWG FILE: 53-02-32_C-101.dwg
DRAWN BY: JLR
DESIGNED BY: JAF
CHECKED BY: JLL

SITE PLAN

C-101
SHEET 4 OF 14

Path and Name: L:\Projects\48-0250-00-00\Drawings\48-0250-00-00.dwg Printed on 11/07/18 9:44 AM by Thomas R. Brown

